DOCUMENT RESUME

ED 390 690 SE 057 468

AUTHOR	Schwartz, Bill; Growe, Barry, Ed.
TITLE	Within Our Reach: Helping Students Develop An International Perspective. International Education Resource Units Grades 5-8.
INSTITUTION	United Nations Children's Fund Canada, Toronto (Ontario).
SPONS AGENCY	Canadian International Development Agency, Ottawa (Ontario).
REPORT NO	ISBN-0-921564-00-7
PUB DATE	88
NOTE	68p.; For Grades 1-4 units, see SE 057 467.
PUB TYPE	Guides - Classroom Use - Teaching Guides (For Teacher) (052)
EDRS PRICE	MF01/PC03 Plus Postage.
DESCRIPTORS	Active Learning; Children; *Cooperation; *Developing Nations; Foreign Countries; *Global Approach; *Health; Intermediate Grades; Junior High Schools; *World Problems

ABSTRACT

This document is a curriculum resource aimed at correcting common misconceptions that people have of conditions in the developing world. It emphasizes the common needs and aspirations of all the world's children while focusing on cooperation as a basic human response that can be directed toward solving some major global problems. This guide is divided into five units: health, food, education, respect, and cooperation. The first chapter of each unit helps students learn to understand the nature of the problem being investigated. The second chapter of each units enables students to examine significant recent progress toward solving that particular problem. In addition to the teachers' notes, each chapter has student activity sheets. These units, written by teachers, fit into many parts of the curriculum. This guide places the basics-language arts, social studies, and mathematics-within the context of active learning sequences. An underlying principle of this guide is that remarkable achievements can be made if people learn to work together. For this reason, cooperative problem-solving and presentations are emphasized throughout. Three appendices include: curriculum matrix, gross national products, and the cooperative aspects of the lessons. (JRH)

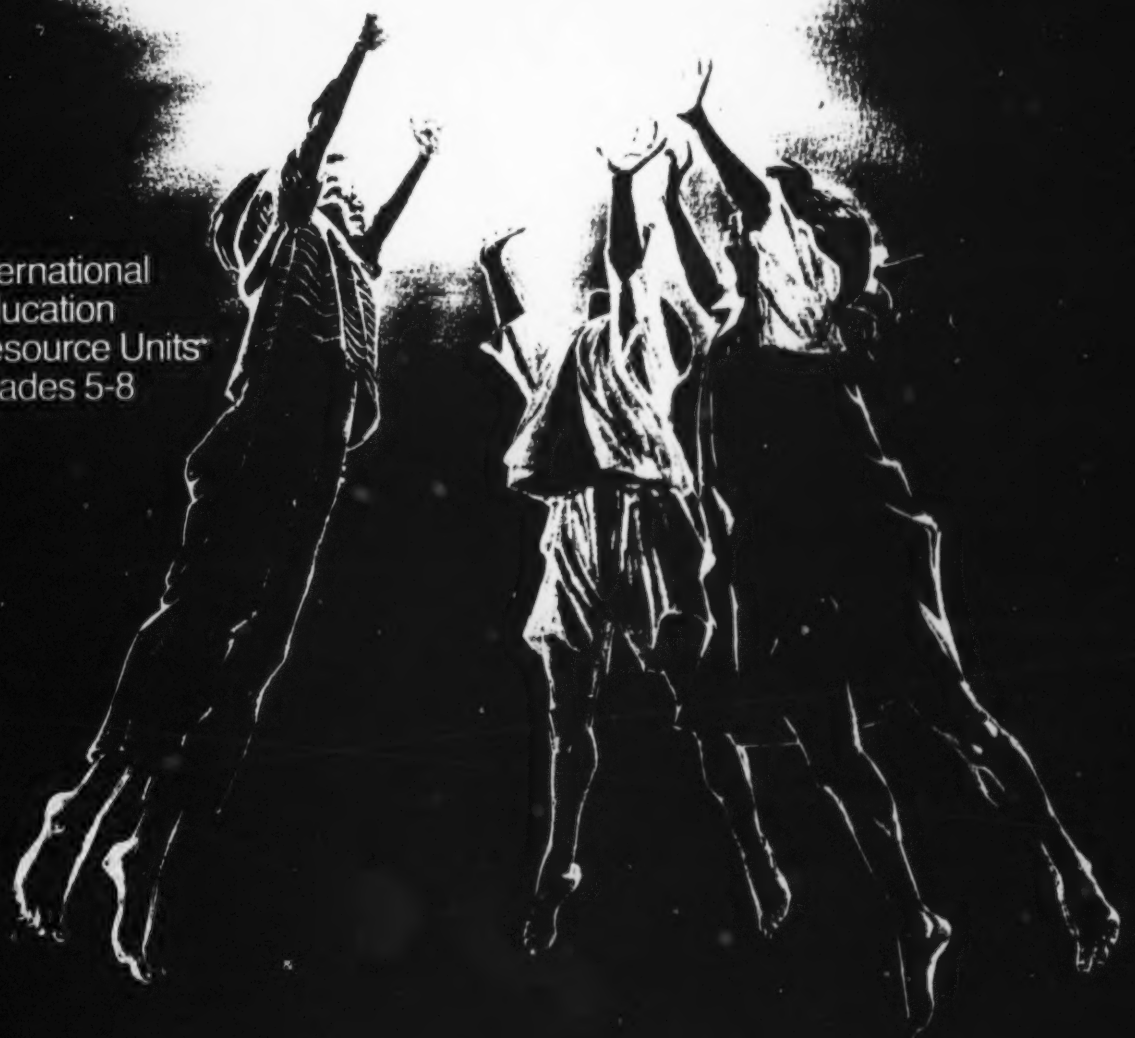
****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED 390 690

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY
L. Wolff
TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)
☑ This document has been reproduced as received from the person or organization originating it.
☐ Minor changes have been made to improve reproduction quality.
• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

International Education Resource Units Grades 5-8



HELPING STUDENTS DEVELOP AN INTERNATIONAL PERSPECTIVE

unicef
EDUCATION

Within Our Reach

For the world's children, good
health and education are within reach.

Within Our Reach

Author:	Bill Schwartz
Editor:	Barry Growe
Research:	Lindsey Cook
Art:	Brent Lynch
	John Oresnik
	Amanda Growe
Contributor:	Ellen Schwartz
Editorial Direction:	Randy Ormston
Reviewers:	Bob Pletsch
	Elma Schemenauer

Acknowledgements: Janet Moth, Tony Tigwell (The Paper Bag Game) Terry Orlick (The Line Game and The Rope Game, adapted from The Second Cooperative Sports and Games Book) Educators for Social Responsibility (The Hand-to-Hand Game, adapted from Dialogue, A Teaching Guide to Nuclear Issues)

© 1988 UNICEF Canada

Funding for this publication has been provided by the **Canadian International Development Agency.**

Canadian Cataloguing in Publication Data

Schwartz, Bill
Within our reach

ISBN 0-921564-00-7

1. Developing countries - Study and teaching (Elementary). I. Canadian UNICEF Committee. II. Title.

LB1530.S93 1988 909'.09724 C88-094289-4

Contents

		Page
Reaching for Health		
The Paper Bag Game	Problem	5
The Child Protectors	Progress	11
Reaching for Food		
Malnutrition – A Silent Disaster	Problem	17
What a Team – 100 Million Farmers and Ten Canadians!	Progress	25
Reaching for Education		
Anx Vrnwu Iziaw	Problem	31
Word Power	Progress	35
Reaching for Respect		
Letter from a Village	Problem	41
Student Reporters Set the Record Straight	Progress	47
Reaching for Cooperation		
The Hand-to-Hand Game	Problem	51
No Kidding: Kids Stop a War Sharks Save Kids' Lives	Progress	53
Appendix A Curriculum Matrix		62
Appendix B Gross National Products		62
Appendix C Educating for Cooperation		63
Glossary		64

Introduction

Every teacher and every student knows the power of high expectations. If parents and teachers expect great things, children are much more likely to reach their potential in school.

Exactly the same rule applies to the well-being of children who live in the world's poorest countries. We North Americans know much about their misery, little of their courage and intelligence and little of the remarkable progress they have made in recent years.

This curriculum resource seeks to repair that damaging imbalance in knowledge. Because of the imbalance, our expectations are low. **Yet good health and education for all children worldwide are within our reach.**

This need to establish realistic expectations has determined the structure of **Within Our Reach.** The five units examine:

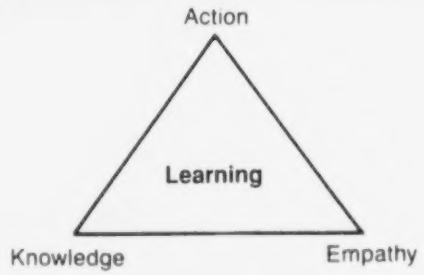
- health
- food
- education
- respect
- cooperation

Generally, the first chapter of a unit helps students learn to understand the nature of the problem being investigated. In the second chapter of the unit, students examine significant recent progress toward solving that particular problem.

Connecting with the Classroom

UNICEF recognizes that elementary school students are best stimulated by active involvement in their learning. This guide places the basics — reading, social studies, mathematics — within the context of active learning sequences.

Knowledge, empathy and action are three essential components of learning. Active learning generates empathy. Empathy motivates students to acquire knowledge and to act to make their world a more just place.



A major theme of this curriculum guide is that remarkable achievements can be made if people learn to work together. For this reason, cooperative problem-solving and presentations are emphasized throughout.

These units, written by teachers, fit into many parts of the curriculum. A curriculum integration matrix is provided. (See Appendix A.)

In addition to the Teachers' Notes, each chapter has student activity sheets. These are to be photocopied and distributed to students for their use as they actively participate in a variety of interesting ways.

TEACHERS' NOTES

REACHING FOR HEALTH

The Paper Bag Game

In a country where there is massive unemployment and no social security, often the entire family must work to survive. Despite a meagre diet, everyone must work long, hard hours. If someone in the family gets sick, the well-being of the entire family is threatened because of reduced income and increased medical expenses.

Activity at a Glance

In "family" groups of five or six, students make paper bags to sell for survival wages. An illness in the family forces them to work still harder to stay alive.

Learning Outcomes

Students will be able to:

- describe the personal qualities required to earn a survival living
- assess the amount of menial labor required to earn enough money to survive
- explain how poverty can inhibit a family's ability to provide adequate medical care

Suggested Time: One hour

Curriculum Tie-in

Social Studies
Map Work
Health

Materials

World map
Large quantity of old newspapers
Glue or paste for each group
Damp cloths for cleaning up
The Paper Bag Game activity sheets (one set per student)

Suggested Directions

1. Distribute the student activity sheets. Have the students read the description of life in Calcutta, India. Discuss. Locate Calcutta on a map of the world.
2. Tell the students they will be learning about family survival in Calcutta. Demonstrate how to make a paper bag (see student activity sheets).
3. Have students form "families" of five to six people (two people in the family will be adults, the rest will be children). Tell the students that each member of the family will need to make at least 160 bags during each eight-hour working day (160 per day = five every 15 minutes = one every three minutes) in order to earn enough money to pay for rent and just enough food to survive: rice, cooking oil and vegetables.
4. Distribute newspapers and glue to the families. Have each student practise making a paper bag using a double page from a tabloid newspaper or single page from a full-sized newspaper. Then announce that the work day has begun: each family must make at least one bag per person every three minutes. The teacher now acts as the "bag inspector," randomly checking the quality of the bags and rejecting any that are substandard.
5. After six minutes, have students pause and count their bags. They should have completed two bags each. Are they making enough for rent and enough food to survive? Will they have any money for extras like a chicken, or new clothes to replace their torn shirts and pants?
6. Three minutes later, have students pause again. Tell them that their one-year-old brother has diarrhea from drinking a mixture of powdered infant formula and unclean water. (If necessary, explain that diarrhea is the condition in which waste material travels too quickly through the large intestine. A person with diarrhea has to go to the bathroom very frequently to get rid of semi-solid wastes. Sometimes the person also has painful stomach cramps. Some students may have experienced diarrhea after eating food that disagreed with them.) The mother will have to leave the group to take the baby to a doctor. This means that the family will have to make 200 extra bags (two extra bags every five minutes) to pay for the doctor's fee, medicine and the bus rides to the doctor and back. The family, minus the mother, should begin making bags again.

7. After six more minutes have students stop making the bags. Discuss what it was like to make the bags. Was it difficult? Did the family work together well? What effect did the missing mother have on the family's bag production?

8. The students should count how many bags the family has made in 15 minutes and fill in the answers on the student activity sheets.

9. Discuss the answers. Ask the class what other things people would have to save for; for example, shoes, clothes, bicycles and medicine. How many more hours a day would the family have to work in order to provide these extras?

10. Have students clean up and package the bags and remaining newspapers for recycling.

The Paper Bag Game

Where does your family get money for food, clothes, and a home to live in? Where do other families in your community get money to pay for these things? If you live in a country village some may get it from farming. If you live in a city, some may earn money from jobs like working in a store, working in an office or delivering mail.

In poor countries life is quite different than in Canada.

Cities often grow faster in poor countries, where many poor villagers leave farm land in search of work and better living conditions. But instead of finding a better life in the city, they often end up in sprawling shanty towns, built by villagers who came before them, and who failed to find jobs.

Calcutta, in India, is one of these fast-growing cities. A hundred years ago, the population of Calcutta was 630,000; today at least 10 million live there. Calcutta has many problems, one of which is lack of proper housing. In fact more than three million people live in crowded slum housing and nearly a quarter of a million people simply sleep in the streets.

Another problem is unemployment. Half of the city's population has no full-time work. Where can families get money for the things they need? Though there are few jobs, some brave people have created their own industries and services. These include shoe-shining, rickshaw-pulling, tailoring, the sale of waste vegetables and paper bag making.

Families that have no money for rent must sleep on sidewalks.

Making Bags for Survival

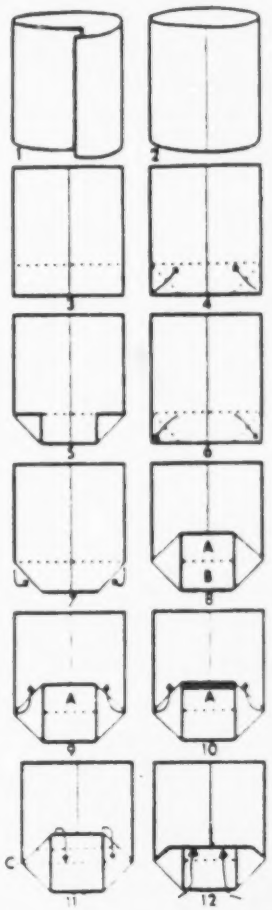
Pretend you and your family live in the slums of Calcutta. You earn a living by making paper bags from scrap paper. Shopkeepers buy the bags. However, many families earn a living making bags. If you work too slowly or if your bags are not good enough, other families may take away your business.

You make the bags by folding and gluing. Each member of your family has to make one bag every three minutes for eight hours each day to buy just enough food to keep from starving, and to pay the rent on your small apartment. If any of the children gets very sick, 200 extra bags will be needed to earn enough money to pay for the doctor's fee, medicine and the bus ride to get the mother and child to the doctor and back.

The shopkeeper will not buy bags that are poorly made.

How to Make a Paper Bag

1. Fold sides of paper to middle, with a slight overlap (figure 1).
2. Glue overlapping edge onto the edge underneath it (figure 2).
3. Turn up bottom edge about 5 cm; crease and unfold (figure 3).
4. Fold up bottom corners to the crease (figure 4).
5. Press down and crease (figure 5).
6. Unfold (figure 6).
7. Tuck the corners up inside the tube (figure 7).
8. You now have a bag with two flaps, A and B, as in figure 8.
9. Fold back the upper flap, A (figure 9).
10. Put a line of glue along upper edge of flap A (figure 10).
11. Fold down on itself to the middle line, C (figure 11).
12. Fold up the lower flap, B, to overlap the glued area and glue down (figure 12).



10

unicef EDUCATION

1. How many bags did your family make in 15 minutes? _____

2. How many bags does your family have to make every 15 minutes to avoid starving and losing your apartment, at five bags per person? _____

3. Will your family have enough to eat and pay rent? _____

4. Will you be able to pay to get your baby brother medical care? _____

5. If you didn't make enough bags for your family to survive, what could you do to increase your bag-making? _____

_____

_____

6. How else could you get money, aside from bag-making? _____

_____

_____

7. How many extra bags did you have left after 15 minutes, if any? _____

8. How many extra bags would you have at the end of eight hours of work? _____

9. If you made more than enough bags, what would you do with the extra money? Each bag is worth 1/30 of a rupee. Choose from the "Prices in Calcutta" chart.

_____

_____

_____

_____

PRICES (IN RUPEES) IN CALCUTTA

FOOD		CLOTHES	
1 kg vegetables	3.00	pants	40.00
1 kg rice	2.00	shirt	30.00
1 dozen eggs	6.00	cheap sari	25.00
1 L milk	2.00	cheap sandals	10.00
1 kg flour	2.00		
1 whole chicken	20.00	OTHER GOODS	
1 kg ghee(butter)	30.00	blanket	40.00
6 oranges	2.00	1 L paraffin	2.00
6 bananas	1.00	saucepan	15.00
cup of tea	0.50	1 kg soap	10.00

TEACHERS' NOTES

REACHING FOR HEALTH

The Child Protectors

Because of warfare and poverty, many children in developing countries do not receive protection against childhood diseases. Four simple, low-cost methods, collectively called GOBI, enable parents to protect millions of children from some of poverty's worst effects. GOBI includes Growth monitoring, Oral rehydration, Breastfeeding and Immunization.

Activity at a Glance

Students pretend that they have millions of dollars to spend on child health in a developing country with a "low under-five survival rate." Their task—to recommend to the Prime Minister how to save a greater number of children's lives over a five year period: by instituting a GOBI program, or by building hospitals. After deciding on a course of action, students must respond to the news that some of the money may be redirected toward buying rocket launchers.

Learning Outcomes

Students will be able to:

- explain the under-five survival rate
- name the four child protectors represented by GOBI
- recognize that each type of GOBI treatment is simple to do
- know that GOBI treatments prevent poor mental and physical development and save millions of children's lives a year
- compare the costs of providing health services with military costs

Suggested Time: Approximately one hour

Curriculum Tie-in

Social Studies
Mathematics
Language Arts
Health

Materials

"The Child Protectors" student activity sheets (one set per student)

Suggested Directions

1. The basic measure of child survival is the under-five survival rate. The following figures represent the percentage of children born who survived to age five. For example, in Burma 91 out of every 100 children born survived to the age of five; in Afghanistan, 67 out of every 100 survived.

The Under-Five Survival Rate (1985)	
Afghanistan	67.1
Burma	90.9
United States	98.7
Canada	99.0

   Place this information on the board. Compare the figures. Make sure the students understand the phrase "under-five survival rate." Ask: what would some of the worries be of a family in a country with a low under-five survival rate? What do you think your health and the health of your brothers and sisters would be like?

2. Tell the class: "Pretend you are the government leaders in charge of children's health in Pais de Poore. Pais de Pobre is an imaginary poor country. The Prime Minister (to be played by the teacher or the principal) has set aside 24 million dollars over a five year period. The money is to improve children's health and survival rates. The Prime Minister decided to do this after discovering the difference between the child survival rate in Canada (99.0) and Pais de Pobre (69.2, third lowest in the world).

   "The 24 million dollars is enough to build a small children's hospital and staff it for five years. However, there is disagreement about building the hospital. Some health workers claim that providing a country-wide program called GOBI would save more children. GOBI is a simple, low-cost plan for preventing children's health problems.

   "Your task as children's health care leaders in Pais de Pobre is to decide how to spend the 24 million dollars to save the most children's lives."

3. Hand out the student activity sheets. Introduce the concept of GOBI by reading with students the section titled "What is GOBI?"

4. Break the class into four groups. Assign one GOBI element to each group. Ask the students to complete the activity sheet "Congratulations, You're a Millionaire," filling in the cost per child and the number of children's lives saved for their group.

5. Have representatives from each group present their findings to the Prime Minister. Each representative should explain his or her group's GOBI component, and state how many lives it would save. The class should record this information on their activity sheets. The Prime Minister and the class should ask questions if clarifications are needed.

Answers to GOBI Activity Sheet

	Health Care Project	Lives Saved
	Hospital	100,000
Group 1:	Growth Checking	2,000,000
Group 2:	Oral Rehydration	1,200,000
Group 3:	Breast-feeding	1,500,000
Group 4:	Immunization	1,000,000

6. **Discussion:** If a full GOBI program were put into practice, how many children's lives would it *fully protect*? That is, how many children would get all four parts, not just one or two?

   Note that the number of children receiving full protection from all four GOBI components is one million. This is equal to the number of children saved by the most costly GOBI component, immunization, *not* the sum of the figures of all four.

7. Take a vote on what to recommend to the Prime Minister. How should the 24 million dollars be spent, on a hospital or GOBI?

8. After the vote, the Prime Minister informs the class that the government has just been given some bad news which may affect their child health plan. A neighboring country, with whom Pais de Pobre is having a border dispute, has just purchased 10 jet fighters. The Prime Minister feels it may be necessary to purchase 20 anti-aircraft rocket launchers to protect the country. The only available money is in the health budget. The Prime Minister wants to know what effect taking some money from the children's health plan would have. Have the class do the last section of the activity sheet, and discuss it in their groups.

9. Have the class make recommendations to the Prime Minister as to how the 24 million dollars should be spent.

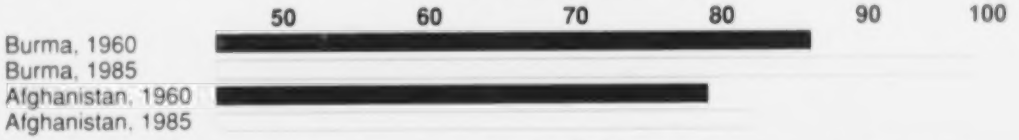
10. Discuss how this simulation compares with real life.

Extension

Rich countries like Canada have differences in the infant mortality rate in different areas of the country. A 1987 study found an infant mortality rate of 19.5 deaths per 1000 births in Annapolis County, in largely rural western Nova Scotia. That figure is double the the Canadian average of 9.7 per thousand. A baby born in Jamaica has a slightly better chance of surviving the first year than a baby in Annapolis County.

If information sources are readily available, students could find out the infant mortality rate for the part of the country in which they live. They could compare it with the rates in other parts of the country, and make recommendations as to how infant mortality rates could be lowered.

The Under-Five Survival Rate



Tremendous progress is being made in many countries where GOBI is being used. Burma's Under-Five rate has improved by 14%, Saudi Arabia's by 19%, Ivory Coast's by 16%, Oman's by 20%. However, wars, such as the war in Afghanistan, can destroy basic health care.

Relatively few children are killed directly in warfare. They die mostly because war removes money and the adults who care for the children. In 1987 Afghanistan had the worst child survival rate in the world. Mozambique, another country at war, had the worst infant (under one year) mortality rate.

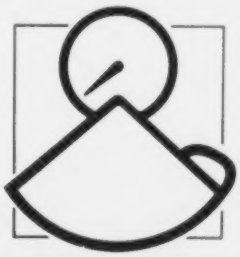
The Child Protectors

What Is GOBI?

Do you have a baby sister, brother or cousin? Probably you love that little baby. You want him or her to grow up strong and well. In rich countries like Canada, most babies do.

However, in poor countries millions of babies die. Millions more don't grow up strong and well.

Four simple, low-cost methods—nicknamed GOBI—give parents the power to protect their children's health. Using these methods, parents can cut deaths by half. The four methods are: **G**rowth Checking, **O**ral Rehydration, **B**reast-feeding, **I**mmunization.



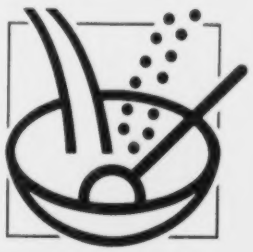
GROWTH CHECKING

Weigh the child every month.

Suppose the baby doesn't get enough food, or doesn't get the right foods for good growth and health. That baby is suffering from **malnutrition**. Because of malnutrition, the baby's body and mind may not develop properly. The baby could even die if his or her body is too weak to fight off even ordinary diseases like the flu.

Slow weight gain can warn parents of poor growth before malnutrition's effects become serious. They check their children's growth by weighing them every month. They record the results on a chart. If children are growing poorly, parents can try to enrich their diets.

Cost per child for five years: $3 This includes a growth chart for every child, and weighing scales.



ORAL REHYDRATION

Give children plenty of food and fluids when they have diarrhea.

You may have had diarrhea when you ate something that disagreed with you. When a person has diarrhea, waste material travels very quickly through the large intestine. A person with diarrhea has to go to the bathroom often.

Diarrhea is a big problem for many children in poor countries. It takes away their appetite, causing malnutrition. It causes their bodies to become **dehydrated** (to lose too much water). In fact, dehydration is the biggest single killer of children in the world today.

Many parents think they shouldn't give children food and fluids when they have diarrhea. However, they should. Also, if the children are dehydrated, parents should give them a special mixture of salts. These salts help the body take in fluids.

Oral rehydration means giving something by mouth to help the body take in fluids to replace those that it has lost. Parents can give either a packet of pre-mixed salts or a homemade mixture. Oral rehydration could save millions of children's lives every year.

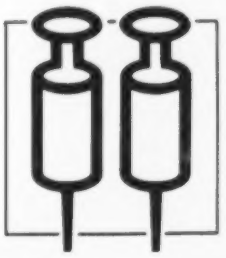
Cost per child for five years: $5 This includes treatment of four episodes of diarrhea per year, at 25 cents per treatment of salts.

BREAST-FEEDING

Feed babies only breast milk for the first few months, and continue breast-feeding into the second year of life.

Breast milk is the perfect food for babies. It protects them against common childhood diseases. In communities with poor water supplies, bottle-fed babies often get powdered milk mixed with unclean water in unclean containers. No wonder that illness and death are two to three times higher among bottle-fed babies in such communities! Breast-feeding could protect the health of millions of infants at very low cost.

Cost per child for 5 years: $4 This includes posters and pamphlets urging mothers to breast-feed. It also includes microscopes to show mothers bacteria in unclean water.



IMMUNIZATION

Immunize children against all six major diseases that vaccines can prevent.

Probably you remember having a polio-tetanus shot or some other vaccination. The needle probably hurt you, but it was much better than getting a serious disease!

Measles, whooping cough, tetanus, diphtheria, polio and tuberculosis kill about 3.5 million children a year. Even when children don't die, such diseases can cause crippling, brain damage, and other problems. Immunization can prevent these diseases.

Cost per child for five years: $6

Health Care Workers

Health-care workers bring GOBI to towns and villages. These workers give immunization shots. They help weigh children and record their growth on charts. They educate parents on the importance of breast-feeding. They provide oral rehydration salts in packets, with instructions on how to use them.

Thousands of health-care workers must be trained to start a GOBI program. Only a few doctors and nurses are needed at a small hospital. However, it costs a thousand times more to train a doctor than a health-care worker. This means the training costs are about the same for a small hospital as for a GOBI project. These costs have been included in the GOBI costs listed earlier.

Congratulations, You're a Millionaire

Your group has received six million dollars to use in providing health care for children over the next five years. Will you recommend that the six million dollars be used to build and operate a hospital for five years? Or will you recommend that the money be used to pay for a part of the GOBI program? To help you decide, fill in the chart below.

COST OF DELIVERING CHILDREN'S HEALTH CARE OVER A FIVE YEAR PERIOD

	Health Care Project	Costs per Child	Money Available	Total Lives Saved Over 5 Year Period
	Hospital	$240 per child	$24,000,000	100,000
Group 1:	**G**rowth Checking	$__ per child	$ 6,000,000	_____
Group 2:	**O**ral Rehydration	$__ per child	$ 6,000,000	_____
Group 3:	**B**reast-feeding	$__ per child	$ 6,000,000	_____
Group 4:	**I**mmunization	$__ per child	$ 6,000,000	_____

Guns or Health

What do you recommend to the Prime Minister?

1. Each anti-aircraft rocket launcher costs $500,000. How much will 20 anti-aircraft rocket launchers cost?

_____

_____

_____

2. How many children will not be protected if 20 rocket launchers are purchased from your budget?

3. What peaceful methods could you suggest to the Prime Minister, instead of buying rocket launchers? Are there other ways of dealing with the need to protect your country without hurting your efforts to save children's lives?

18

REACHING FOR FOOD

Malnutrition—A Silent Disaster

The average person in the developing world consumes only about two-thirds as much food energy as a person in the developed world and only half as much protein. Most malnourished people live in Asia, Africa and South America, but North America is not exempt. Children are especially susceptible to malnutrition; often physical and mental damage in infancy cannot be detected until it's too late.

Activity at a Glance

Students play the "Peanut Game," which illustrates that food is unequally distributed throughout the world. They learn what **malnutrition** is. By examining the Hunger Circle, students see that malnutrition can become a vicious circle. After studying the photographs and diet of two Indian boys, students calculate the daily diet needed to prevent physical and mental disabilities.

Learning Outcomes

Students will be able to:

- define malnutrition
- explain how malnutrition leads to decreased energy, which leads to decreased food production (the hunger circle)
- describe how food is unequally distributed in the world
- list the effects of malnutrition on children

Suggested Time: Approximately two hours

Curriculum Tie-in

Social Studies
Mathematics
Map Work
Health
Language Arts

Materials

Seven bags of unshelled peanuts (15 peanuts in a bag)
World wall map
The "Malnutrition—A Silent Disaster" student activity sheets (one set per student)

Suggested Directions

1. Divide the class into five groups. One group will have three students while the remainder of the class will be equally divided into four groups (there should be approximately six students in a group).

2. Give the three-student group three bags of peanuts. Give each of the remaining groups one bag of peanuts. Distribute the bags ceremoniously, and emphasize that the small group got three bags.

3. Have the students eat the peanuts. Allow 5-10 minutes for eating. Encourage discussion and interaction.

4. Discuss what happened during the game. Were there any peanuts left? How did each group react to having too much or too little? Did the groups interact? Was this distribution fair? What does this experiment represent?

5. Suggest, if no one comes up with the appropriate response, that the peanuts represent the world's available food. The smaller student group represents some of the wealthier countries of the world, including Canada and the United States, Japan, Australia and the countries of Western Europe. The remaining four groups represent some of the world's poorest countries such as Mozambique, Haiti, Bangladesh and Papua New Guinea. (See Appendix B.)

6. Help students locate these countries on a world map. Point out that lack of food is not confined to Ethiopia or the Sudan as many North Americans believe. Over two-thirds of people who don't have enough to eat live in Asia. Most of the rest are in South America and Africa.

7. Explain the meaning of malnutrition.
Malnutrition is lack of food and\or lack of proper food.
Lack of food means not enough kilojoules (calories) to fuel the body's need for energy.
Lack of proper food means, for example, not enough calcium for bone growth and/or not enough protein for muscle growth.

The hungriest children in the world are malnourished in both ways. By contrast, many North Americans have plenty of energy foods—yet are malnourished. Discuss the reasons.

8. Ask this series of questions and briefly record the answers on the board. "How do you feel when you're hungry? How would not eating any breakfast or lunch affect your school work or your volleyball game? You know how it feels to be hungry for a few hours. Imagine what it would be like to be hungry all the time."

9. Draw a Hunger Circle on the board. (See below.) During discussion ask students to try to fill in the blanks.

10. Distribute the "Malnutrition—A Silent Disaster" student activity sheets. Tell students that the Hunger Circle shown on the first sheet is an expansion of the one they developed on the board. Guide students in reading the labels and interpreting the drawings in the Hunger Circle.

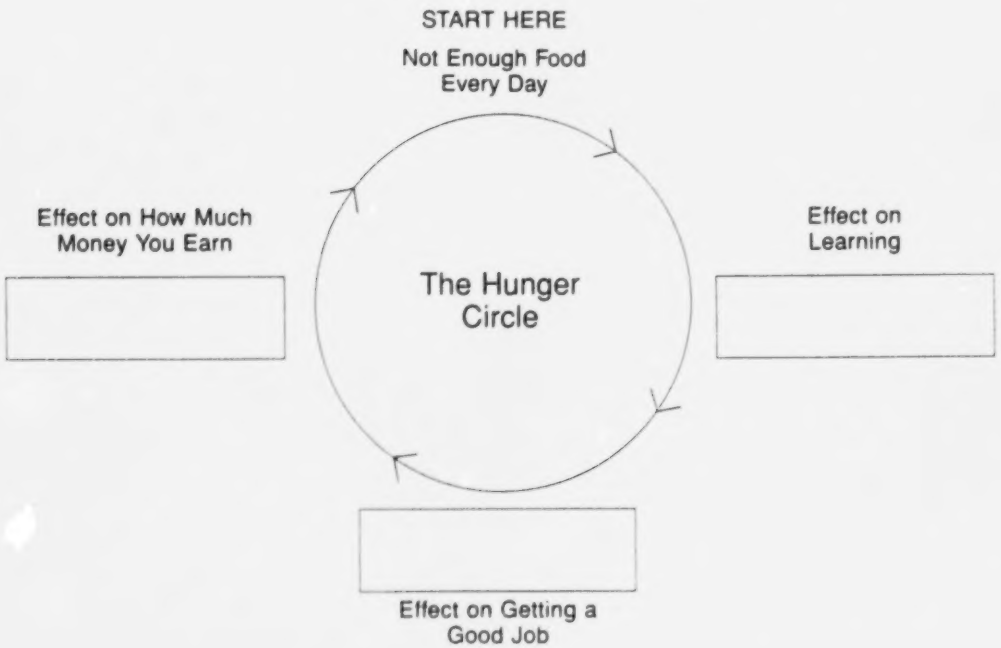
11. Have students carry out the short writing assignment that follows the Hunger Circle on the activity sheet. When they have completed it, invite some or all of them to share their writing by reading it aloud.

12. Have students look at the picture of Sakthivale and Vasanth on the next activity sheet. This photograph illustrates the effects of diet on two Indian children. Ask the students how old they think these boys are. (Both are four years old.)

13. Have students read the discussion accompanying the picture.

    Malnutrition in the early years can cause brittle bones, and lack of muscle and brain development. Ask students how this will affect Vasanth when he is their age. Emphasize the permanence of the damage. Vasanth may never fully recover, even if he is fed well in the future.

14. In order to ensure that students understand the effects of malnutrition, have them fill out the Daily Diet chart. They will use the nutrition chart under the boys' picture for the information they require.


START HERE
Not Enough Food Every Day
Effect on How Much Money You Earn
Effect on Learning
The Hunger Circle
Effect on Getting a Good Job

Answers for page 22

Vasanth's Sample Daily Diet

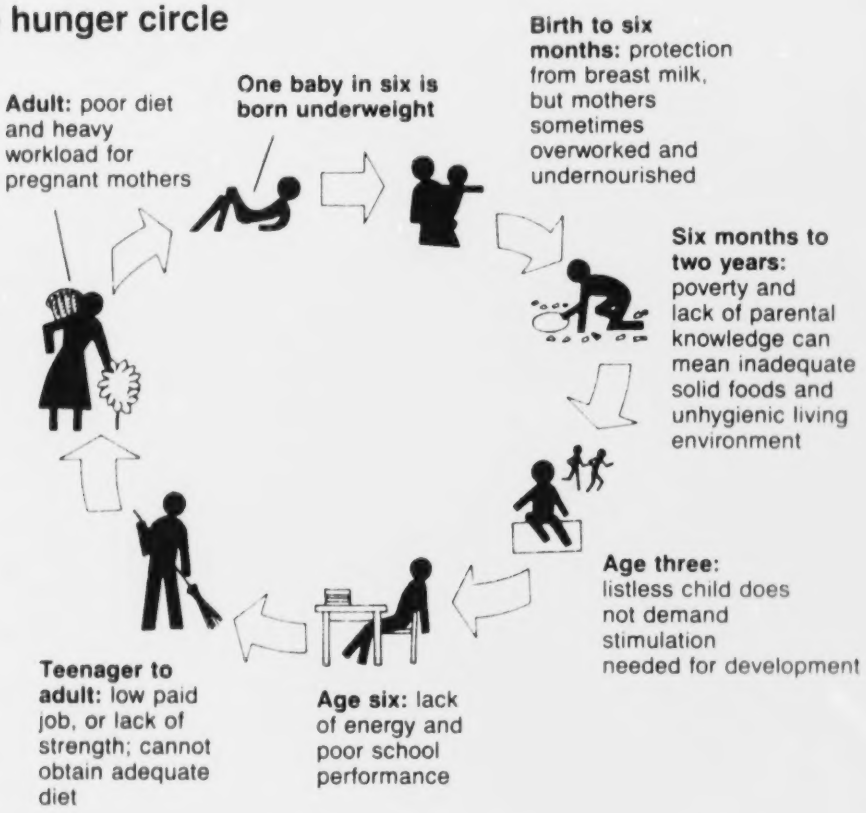
Amount	Food	Kilojoules	Protein
350 ml	rice	1557	7.4
15 g	oil	552	0.0
2	chapatis	754	7.0
1 small	banana	356	1.1
1 small	egg	272	5.2
40 g	vegetables	48	0.5
7 g	ghee	209	0.0
TOTAL		3748	21.2

How much more is needed?

Kilojoules	6000
	-3748
	2252
Protein	30.0
	-21.2
	8.8

Malnutrition – A Silent Disaster

The hunger circle


Birth to six months: protection from breast milk, but mothers sometimes overworked and undernourished
Six months to two years: poverty and lack of parental knowledge can mean inadequate solid foods and unhygienic living environment
Age three: listless child does not demand stimulation needed for development
Age six: lack of energy and poor school performance
Teenager to adult: low paid job, or lack of strength; cannot obtain adequate diet
Adult: poor diet and heavy workload for pregnant mothers
One baby in six is born underweight

Pretend you are one of the following people in the Hunger Circle.

- A six-year-old
- A teenager
- An adult

Write one or two paragraphs about a day in your life.

22

SAKTHIVALE AND VASANTH

How Old Are These Boys?

These two Indian children, Sakthivale on the left and friend Vasanth on the right, are the same age. Even though you can clearly see the difference between them now, you wouldn't have been able to when they were babies, when the damage was being done. The way children will grow in the future is set in the first 24 months of life.

Vasanth's growth was stunted by *malnutrition* — not enough food and not enough of the right kind of food to help him grow.

The problem is that malnutrition in babies is invisible — even to a doctor. The only way of detecting poor growth is by regularly weighing a child during the first two years of life.

Nutrition Chart

Amount	Food	Kilojoules for Energy	Protein (g) for Muscle	Amount	Food	Kilojoules for Energy	Protein(g) for Muscle
100 ml	rice	445	2.1	1 small	egg	272	5.2
100 g	oil	3683	0.0	1 chapati	(bread)	377	3.5
100 g	vegetables	121	1.3	1 small	orange	205	1.0
250 ml	milk	367	8.8	1 small	banana	356	1.1
100 g	lentils	444	7.8	7 g	ghee (butter)	209	0.0
40 g	chicken	347	10.6				

A four to five year old child needs about 6700 kilojoules or 1600 calories each day for **energy**. He or she also needs at least 30 grams a day of protein in order for the bones and muscles to grow and the brain to develop.

1. Use the Nutrition Chart to figure out how many kilojoules of energy Vasanth gets from his daily diet. Also figure out how much protein he gets. Place the answers in the spaces provided in the Sample Diet Chart.

Vasanth's Sample Daily Diet

Amount	Food	Kilojoules	Protein
350 ml	rice	1557	7.4
15 g	oil	_____	_____
2	chapatis	_____	_____
1	banana	_____	_____
1	egg	_____	_____
40 g	vegetables	_____	_____
7 g	ghee	_____	_____
Total		_____	_____

- Does Vasanth receive the amounts of kilojoules and protein that he needs?

  Yes _____ No _____

- How much more food energy (kilojoules) and protein does Vasanth need? See the Nutrition Chart under the picture.

What Vasanth Needs To Be Healthy

- What other foods would give Vasanth enough energy and protein to grow?

Amount	Food	Kilojoules	Protein (grams)
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
Total		_____	_____

2. Explain why you think Vasanth suffers from malnutrition.

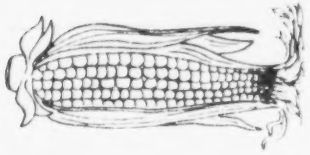
3. If the people in Vasanth's community could grow enough food, what foods are most needed to bring their diet up to the level they need?

What do people eat?

Rice

Sorghum

Maize

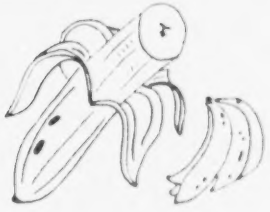


Cassava

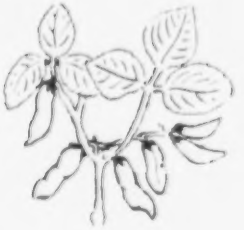
Millet

Yam

Plantain



Soybean



28

unicef
EDUCATION

REACHING FOR FOOD

What A Team: 100 Million Farmers And Ten Canadians

Cooperation increases the chance for success. Developed and developing countries working together can help solve the world's food problems.

Activity at a Glance

Students learn how farm radio broadcasters from Canada and the developing world have formed a huge information network to increase world food production. Students imagine that they are scriptwriters for this network—they write and perform a script promoting healthy diets for children.

Learning Outcomes

Students will be able to:

- express the benefits of cooperating to accomplish various tasks
- describe the "Developing Countries Farm Radio Network" and its benefits
- investigate a simple, low-cost method of health care for children

Suggested Time: Two hours

Curriculum Tie-in

Social Studies
Language Arts

Materials

The "What a Team" activity sheets (one set per student)

If available, samples of short written and tape-recorded radio scripts

Suggested Directions

1. Distribute the student activity sheets, which describe an example of mutually beneficial cooperation between countries. Have the students read the article "What a Team" and answer questions 1 - 3.

2. Point out that Canadians, through organizations such as the Canadian International Development Agency (CIDA), pay for the preparation of the information presented on the Developing Countries Farm Radio Network (DCFRN). Ask the students what benefits they think a rich country like Canada receives. (One major benefit is that the DCFRN helps countries become more self-sufficient. As a result these countries need less aid from developed countries like Canada. If developing countries can supply their own food, the money previously used to buy imported food may be used to purchase Canadian goods, thus reducing unemployment in Canada.)

3. Discuss the answers to questions 1 - 3.

   Examples of world problems which can be solved by cooperation include:

   - the nuclear arms race, which can be countered by arms limitations and reduction treaties
   - depletion of ocean fisheries, which can be avoided through international conservation agreements
   - famine, which governments, international agencies, rock stars and millions of individuals worked to alleviate during the 1980s
   - criminals fleeing prosecution – extradition treaties
   - airplane hijacking – international treaties
   - diseases – smallpox eradicated in 1978

4. Next have students read the section "Scriptwriting for the DCFRN." If you have sample written and/or tape-recorded radio scripts, share them with the class.

5. Divide the class into groups of three or four to work on scripts. Have the students research and write the scripts either in class or as homework.

6. Once the first drafts of the scripts are ready, have the students read, time and re-edit the scripts as necessary.

7. Have each script read and recorded on a tape recorder.

8. Play the scripts back to the class. Discuss the merits of each script, using questions such as the following.

   - Is the script easy to understand?
   - Are the facts correct?
   - Are the facts presented in an interesting way?
   - If you were a parent, would the script lead you to improve your child's diet and start keeping growth charts?

Extension Activities

1. Have the students write a story or draw a picture to illustrate cooperation in their own community.

2. Have the class ask their parents how growth checking is done in Canada.

What A Team: 100 Million Farmers And Ten Canadians

Suppose your family is growing juicy green cabbages in Ontario. But the cabbage heads are starting to split. You wonder why. Then you hear a farm radio broadcast. An Alberta farmer explains a simple way to keep cabbage heads from splitting.

Can farmers in poorer countries also help each other? Farm radio broadcasters from Canada and countries in Africa, South America and Asia have figured out a way to do it.

It all started with George Atkins, a Canadian broadcaster. He toured the "developing world"—countries where most people are poor and many are farmers. On his trip Atkins realized that farm broadcasters, though few in number, could help farmers. Even in the poorest parts of the world, many people have radios. This means that radio broadcasts can be a good way to send useful information to rural people.

Atkins noted that most of the world's food producers are small-scale or "subsistence level" farmers. (A subsistence level farmer is one who is able to raise only enough crops or livestock for his or her own family.) Many of these farmers had excellent ideas to share, but no way of sharing them.

The globe-trotting Atkins found that the solutions to one country's farming problems could often be seen in another country. For example, when he visited Peru, he found that farmers there mixed ashes with their stored grain. Why? The ashes kept insects called weevils from eating the grain. When the farmers wanted to use the grain, they simply washed it. Farmers in

Ghana had the same problem, but did not know what to do about it. Atkins told them how the farmers of Peru solved the problem.

When George Atkins got back to Canada, he raised enough money to start the "Developing Countries Farm Radio Network" (DCFRN). The DCFRN collects information on simple, practical ways for farmers to increase their food production. It also collects information on improving the diet and health of subsistence level farm families. DCFRN listeners send in much of the information themselves.

Ten "Canadians" run the DCFRN offices in Toronto and Guelph, Ontario. They include a Trinidadian from the Caribbean and an African from Sierra Leone. DCFRN staff members prepare free radio broadcast scripts and cassettes in English, French or Spanish for farm broadcasters in developing countries. These broadcasters then use the items that are helpful for the people in their area. If necessary, they translate the items first.

Among the scripts that the DCFRN has prepared are: "Some Farmers Control Insects Without Cost," "Rat Prevention," "Soil Erosion" and "A Special Drink For Children With Diarrhea."

The results have been encouraging. There are over 500 broadcasters in more than 100 countries, with an audience of at least 100 million listeners. What a team, and what an example of cooperation!

1. How does the DCFRN help farmers and their families?

2. The story lists some scripts that the DCFRN has prepared. Choose one of the titles. Explain why you think that subject is important to farmers in developing countries.

3. What are some other problems found in many parts of the world? How could cooperation help to solve them?

Scriptwriting for the DCFRN

Pretend you are a scriptwriter for the DCFRN. It is your job to write the words that a broadcaster reads on the radio. You have just received the following letter from a broadcaster in Thailand.

Dear Farm Radio Network:

Thank you for the useful information you send. With this information, the people in our area have increased food production.

Now that we have more food, we want to make sure parents know how best to feed their children.

We know that, even though children may not be hungry, they still may not be getting the right foods. They need a diet that will help them grow up healthy and strong. We have also realized that the best way to find out if babies and young children are getting a good diet is to weigh them every month.

When the children's weight gain or loss is recorded on growth charts, parents can see whether they are growing properly. If they are not, parents can find out how to improve their diet. Some ways of doing this are:

- breast-feeding rather than bottle-feeding
- starting to give solid foods when the child is about five months old
- not filling children's stomachs with foods that will not help them grow up healthy and strong
- feeding three or four small meals a day instead of only two
- paying special attention to feeding during and after an illness in order to help children catch up on weight loss.

Our government began a weight checking program here four years ago. They realized that children who grow poorly often do poorly at school. When such children become adults, they often do poorly at work, too. When the program started, growth charts showed that only 49% of Thailand's children were growing the way they should. Now that figure is up to 70% and still rising.

So please, can you write a script that will inform your 100 million listeners about the value of growth checking? We want others to benefit from what we have learned.

Sincerely,

Kit Wichiencharoen

Nakhon, Thailand

Work with a group of classmates to prepare a script on the importance of growth checking and diet. The script should be 200 to 300 words long. It should take between 75 and 120 seconds to read on the radio.

Before you write the script, prepare a list of the most important points you want to make about growth checking and diet. Keep in mind that you want to convince parents to take action. You will have to make the script *interesting* and *informative*.

Once your group has written a script, listen to a group member read it out loud. Time how long the reading takes.

Listen for places where you can make the script better. If you wish, add music and/or sound effects.

REACHING FOR EDUCATION

Anx Vrnwu Iziaw

In most cultures, the ability to read and write is essential for a person to fully participate in society.

Activity at a Glance

Students participate in a listening exercise that humorously illustrates the difficulties in transmitting oral messages accurately. Then they write a story on what a day in their lives would be like if they couldn't read.

Learning Outcomes

Students will be able to:

- define literacy and illiteracy
- explain the importance of literacy
- identify how the ability to read and write affects their lives

Suggested Time: One and a half to two hours

Curriculum Tie-in

Language Arts
Social Studies

Materials

The "Anx Vrnwu Iziaw" activity sheets (one set per student)

Suggested Directions

1. Write an indecipherable sentence on the board; for example, Anx vrnwu iziaw. Ask the students to read it and explain its meaning.

2. Students may begin to complain that the sentence doesn't make sense. Explain that this is just a small example of how written language may appear to people who cannot read. Ask students to recall what it was like when they couldn't read. Did that present a problem to them? In what way?

3. Write the word **literacy** on the board. Have a volunteer look it up in the dictionary and read the definition aloud. Ask, "If **literacy** means the ability to read and write, what do you think **illiteracy** means?" Write this word on the board. If necessary, have another volunteer look up this word and read the definition aloud. Make sure the students understand that **illiteracy** means the inability to read or write.

4. Lead the class in a listening exercise. Select four students to be messengers. The rest of the class are checkers.

5. Send the four messengers into the hall. Distribute the "Anx Vrnwu Iziaw" student activity sheets to the rest of the class and have them read them.

6. Ask one messenger from the hall to return to the classroom. Tell this student that you have a very important message for him or her to memorize. A friend, Chris, has been badly hurt while on a hike in the forest. In order to get medical help to the injured hiker, this messenger and the others must describe exactly where Chris is. No one has anything to write with, so each person must pass the message on by word of mouth. Read the the following message to the first messenger:

   > Travel north by the Crowfoot Trail for 2 kilometres until you reach Lakeland Bluff. Take the righthand trail for 300 m. Then turn left on the trail that has a sign saying "Elk Park Cabin - 6.5 km." Follow this trail until you reach the Rocky Point turnoff. Chris is lying 250 metres southwest of the turnoff near the northeast fork of Fish Creek.

7. Have the second messenger return to the classroom. The first messenger repeats the message to the second. The checkers may not help. On the listening forms, they are to write down any missing information, added information or other mistakes.

8. Repeat the process until the fourth messenger has delivered the message.

9. Discuss the exercise with the class using questions such as the following.

   > What happened to the information as it passed from person to person?
   >
   > How might the ability to write have helped?
   >
   > Why would a shorter message be easier to pass on accurately?

How long do you think an oral message can be before one person cannot pass it on accurately to another?

In some countries, most people do not know how to read and write. In such societies, grownups pass their history and skills on to children through storytelling, songs, drawings and demonstrations. What would be some drawbacks to passing on information in this way? What would be some advantages? (richness of language, storytelling and art)

What can we learn from this activity about the importance of literacy?

10. For homework, have students compile a log of all the instances in which they read something outside of school during one 24-hour period. This log should include reading simple things such as traffic signs, as well as more extensive reading such as books and magazines.

11. Using their logs as a guide, have students imagine what it would be like if they couldn't read. Have them write a short story describing their activities during a typical day if they had lost the ability to read.

12. Have students read their stories to the class, and discuss further the value of reading.

Anx Vrnwu Iziaw

Listening For Literacy

A friend, Chris, has been badly hurt while on a hike in the forest. To get medical help to the injured hiker, the other hikers must describe exactly where Chris is. No one has anything to write with, so they must pass the message on by word of mouth.

Your job is to listen to the messengers who are passing on the message. See if each one correctly repeats it to the next messenger. Use the listening forms to write down any missing information, added information, or other mistakes. The correct message is:

Travel north by the Crowfoot Trail for 2 kilometres until you reach Lakeland Bluff. Take the righthand trail for 300 m. Then turn left on the trail that has a sign saying "Elk Park Cabin - 6.5 km." Follow this trail until you reach the Rocky Point turnoff. Chris is lying 250 metres southwest of the turnoff near the northeast fork of Fish Creek.

LISTENING FORM

1

Missing Information -

Added Information -

Other Mistakes -

2 Missing Information -

Added Information -

Other Mistakes -

3 Missing Information -

Added Information -

Other Mistakes -

4 Missing Information -

Added Information -

Other Mistakes -

TEACHERS' NOTES

REACHING FOR EDUCATION

Word Power

In the developing world, the ability to read has implications for children as well as adults, since parents' or other care-givers' literacy improves children's chances of survival. Literacy is essential if development is to take place. However, the developing world is not alone in its literacy problems. In developed countries, too, illiteracy prevents millions of people from reaching their full potential.

Activity at a Glance

Students read a dramatic story about how the ability to read can mean life or death for a family in the developing world. The students then examine worldwide and Canadian literacy levels. They list reasons and suggest solutions for the problem of illiteracy.

Learning Outcomes

Students will be able to:

- identify a number of ways illiteracy affects people in developing and developed countries
- examine literacy levels in Canada and the world
- describe efforts to increase literacy levels in their own community

Suggested Time: Two hours

Curriculum Tie-in

Social Studies
Map Work
Language Arts

Materials

The "Word Power" activity sheets (one set per student)

Suggested Directions

1. Distribute the "Word Power" student activity sheets. Have the students read "The Story of Nasim" and answer questions 1 - 3.

2. Discuss the answers to questions 1 - 3. Point out the benefits of increased literacy in developing countries. A literate society is more productive. It is healthier and less likely to be exploited. Its members can learn about the latest farming techniques, health-care improvements and their basic human rights.

3. Share some or all of the following information with students.

   - One UNICEF study demonstrated that infant mortality could be reduced by 10% if parents could read simple phrases pertaining to inoculation, diarrhea control and the importance of breast-feeding. (Toronto Globe and Mail, October 13, 1987)

   - In the 1970s, the infant mortality rate in India declined from 136 to 110. In 1986 it was reported to be less than 100, according to the New Delhi Family Planning Foundation. "Where women are educated, as in Kerala, it is much less—30. Where they are not...as in Uttar Pradesh, it is very high—over 130." (World Development Forum, February 29, 1988)

   - From 1964 through to the present, the government of Burma has delivered a basic education program which has resulted in raising the literacy level among Burmese woman from 33% to over 70%. This achievement has implications for children as well as women, since mothers' literacy improves their children's chance of survival. (The State of the World's Children - 1987)

4. In the student activity sheets, have students read the short article "Speaking Out About Literacy." Discuss the article with them.

5. Increase students' background knowledge of adult literacy education in their own province and community. You could do so in some or all of the following ways.

   - You could have selected students call local school boards, community colleges and government agencies to find out if there are courses for teaching adults to read in your community.

   - Invite an adult-literacy teacher and/or a person who learned to read as an adult into your class to discuss his or her experiences.

- If no one is available to come into class, students can write to the following organizations for information on literacy:

  Frontier College
  35 Jackes Avenue
  Toronto, Ontario
  M4T 1E2

  Laubach Literacy of Canada
  Box 6548, Station A
  Saint John, New Brunswick
  E2L 4R9

  Movement for Canadian Literacy
  Box 6366, Station A
  Saint John, New Brunswick
  E2L 4R8

  Point out that people who learn English as a second language are not illiterate. If anything, as global citizens, they are more literate than people who know only one language.

6. Once you feel the students are ready, have them carry out the activity described on the last student activity sheet. Guide the student pairs as necessary.

7. After the discussion, give some or all student pairs an opportunity to share the results of their discussion with the class.

8. Some pairs may also want to share by writing a letter to the school newspaper and/or community newspaper.

Word Power

The Story of Nasim

Nasim shifted her baby from one shoulder to another. Little Sajjad gave a weak cry. "Sshh, sshh, my darling," Nasim said.

Little Sajjad buried his face in Nasim's neck. How hot he was! He almost burned her skin. Nasim could tell that the baby's fever had risen during the last hour.

She lowered her arms and looked down at Sajjad. His eyes were glassy, his stomach swollen with discomfort. She knew that under his diaper his skin was rough from irritation.

Sajjad drew in his legs as if in pain and cried feebly. Nasim raised him to her shoulder again. She began to pace across the dirt floor of the hut. "You must get better, my darling," she whispered. "You must." Nasim thought of her baby daughter who had died of the same illness two years ago—of how she had suffered with diarrhea, growing weaker as her fever rose. Nasim had felt so helpless, not knowing what to do. And now, Sajjad.

"You must not die Sajjad," Nasim said. She felt fear in her stomach. Suddenly she remembered a little packet on a shelf at the back of the hut. A health worker from another village had left it with her several months before. Nasim did not remember what was in it—only that it had something to do with treating diarrhea.

Gently she laid Sajjad down in his cradle and ran to the back of the hut. There, under some cloth she had bought at the market, was the packet. On the front and the back of the packet was some writing. However, Nasim did not know the letters, nor what they stood for.

She opened the packet. There was white powder in it, like salt. She was hoping to find a sheet of paper with pictures that would show her how to use the white powder. Her heart beat faster. "Let there be pictures," she prayed. "Please let there be pictures."

أملاح لعمل
محلول معالجة الجفاف بالفم
(ورهيدرات)
أحد الفلول وأسهاله
لذاب محتويات هذا الباكو الواحد في
كوب ماء (سعة ٢٠٠ سم٣) ويعطى
للطفل ليشرب منه أكبر قدر ممكن مع
استمرار أرضاع الطفل من لدى أمه
وتغذيه الطبيعية
الباكو الواحد ٥,٢ جم
يحتوى على
كلوريد صوديوم ٠,٧ جم
بكربونات صوديوم ٠,٥ جم

There were no pictures. There were only words that marched across the packet like soldiers who spoke a foreign language Nasim could not understand. If only she could read! Her husband, who could read a little, was selling their extra vegetables at the market. He would not be home for two days. She didn't know anybody in the village who could read.

Sajjad began to cry again. Nasim ran to the cradle and picked him up. "Ssh, ssh," she said, stroking the baby's hot forehead. She carried him outside, hoping the slight breeze would soothe him. Shading her eyes with one hand, she looked up the

road. Maybe her husband had sold all the vegetables and was coming home early.

But there was no one. Sajjad cried louder, and Nasim began to cry, too, standing in the dusty road.

"What is the matter?" a voice asked behind her.

Nasim spun around. A woman was looking anxiously at her. She was older than Nasim. Some gray strands flecked her hair.

Sniffling, Nasim wiped her eyes on her sleeve. "Who are you?"

"I am Quadar," answered the woman. "I am visiting my sister in this village." She looked closely at Sajjad. "The baby is sick?"

Nasim felt the fear in her stomach again as she nodded. "Yes, he has diarrhea," she replied. She showed Quadar the packet and the paper. "I think this can help him, but —." She hesitated, and then said in a softer voice, "— but I cannot read what it says."

Quadar held out her hand for the packet. "Let me see."

Nasim gave it to her. "Can you read?" she said, hardly daring to hope the answer might be yes.

"Yes," Quadar said proudly. "Last year the teacher came to my village and taught classes. I learned to read then."

Nasim peered over Quadar's shoulder as the older woman read the instructions to herself.

"We must not waste time," Quadar said. "Fetch some water and boil it, just to be sure it's clean enough."

Quickly Nasim did as she was told.

"Now," said Quadar, looking at the paper again. "It says to stir the salts carefully into the water...."

A few weeks later, Nasim stood happily in the doorway of her hut and watched Sajjad toddle around the yard. He chased the chickens, raising great clouds of dust and laughing whenever they squawked and scurried away. There was no longer any sign of the illness that had threatened his life.

Not long after Sajjad got well, a teacher came to Nasim's village and set up a school in an empty shed. Studying was hard for Nasim at first. But once she learned the letters and their sounds and some basic words, she progressed quickly. Soon reading seemed as natural to her as cooking lentils or planting the crops.

Nasim rested her hands on her belly. In a few months, she would have another baby.

Perhaps this would be her last child. There was no need to have more than three, if they lived to be strong and healthy. If they grew up strong and well, they could help with the planting. They could care for Nasim and her husband if they became ill and when they grew old. Nasim knew that if her new baby got sick, she would be able to read the directions on the medicine. She could take better care of her children now. The words that had once marched across the paper like foreign soldiers had become like friends that Nasim knew and understood.

1. Why did Nasim need to know what was written on the packet of salts?

_____

_____

_____

_____

_____

2. Do you know the meanings of the words **illiterate** and **literate**? Use the following clues to find out.

   • At the beginning of the story, Nasim was **illiterate**.

   • However, by the end of the story, Nasim's life had changed. She was **literate**.

Write the meaning of the words.

illiterate _____

literate _____

3. Aside from treating sick children, how else might it help this family to have two parents who can read?

_____

_____

_____

_____

Speaking out about illiteracy

There are now 780 million people in the world who cannot read or write. By the year 2000, that number will probably have risen to one billion. Most illiterate people scratch out a living farming or making whatever money they can in the shanty towns of the less developed countries. But illiteracy is not limited to the poor countries of the world.

In Canada about one million people cannot read or write at all. About five million can read and write only a little. They are not literate enough to read a newspaper, calendar or menu, apply for a job or driver's licence, look up a doctor's name in the telephone book, or read a bedtime story to a child. People who cannot do such everyday tasks are **functionally illiterate**. Most of these people have low-paying jobs or are unemployed.

Over the last ten years, the Canadian government and provincial governments have started programs to help people learn to read. Local communities have also started such programs. However, not many people take part in these programs. Some people don't want to admit they can't read. Also, in some communities, there are not enough classes for people who need them.

1. Work with a partner. Together, list all the reasons you can for illiteracy. Think of illiteracy around the world, and also in your own province and community. Use what you have read and heard in this chapter, as well as your own ideas.

2. Put check marks beside what you and your partner think are the most important reasons. Based on these reasons, suggest some solutions for illiteracy.

TEACHERS' NOTES

REACHING FOR RESPECT

Letter From A Village

Many people in developed countries have misconceptions about people and life in the developing world. They see stories about poverty, famine and war. Based on such information, they may feel that people who live in developing countries are "different." However, basic human needs are the same wherever people live.

Activity at a Glance

Students read a letter about the experiences of a twelve year old Canadian girl living in a village in Malawi, a country in southern Africa. After a class discussion, the students write a letter back to the girl.

Learning Outcomes

Students will be able to:

- describe some differences in living conditions for children in developed and developing countries
- recognize the commonality of basic human needs

Suggested Time: One hour

Curriculum Tie-in

Social Studies
Language Arts
Map Work

Materials

The "Letter From a Village" student activity sheets (one set per student)
Map of Africa

Suggested Directions

1. Distribute the "Letter From a Village" student activity sheets. Have students read the letter.

2. Locate Malawi on a map of Africa. Try to find the town of Dedza. Kachere is about 40 kilometres west of Dedza.

3. Discuss the contents of the letter with students. Ask: "What in the letter was most interesting to you? What in the letter surprised you most? What are some differences between the lifestyles of the Kachere families and your family's lifestyle? What are some reasons for these differences? What do the Kachere families and your family have in common?"

4. Have the students write a letter back to Mandy, the girl who wrote the letter from Kachere. They should ask her questions about Malawi, and give her some news from home. They should also mention two things in Mandy's letter that they think everyone in the world has in common.

5. Discuss the differences between luxuries and necessities. Have students list necessities of life, based on the letter from Malawi and their own knowledge; for example, food, clothing. Have students also list luxuries; for example, VCRs, candy.

6. Guide students in examining basic human needs by asking them in what order they would give up the luxuries. Then ask them in what order they would give up the necessities.

Letter From A Village

Dear Amy:

How are you? I hope you're having fun on your summer vacation. Do you still have a crush on Josh M.?

I know it's taken me a long time to write you, but I've been really busy. As you know, we're living in Malawi, a country in southeast Africa. Malawi is about twice the size of Nova Scotia. Guess that's what I get for having parents who volunteered to work in a developing country.

We're living in a village called Kachere. About 2000 people live here. The nearest town is Dedza, which has about 25,000 people.

You wouldn't believe what happened when we arrived. The villagers were so surprised to see people who looked and dressed like us, that every kid and a lot of grownups came to see us. It was like we were part of the royal family or something.

My friend Winnie, her mom and her baby brother, The Brat, found me a little strange at first.

To tell you the truth, I felt the same way about them. At first everything looked so strange—their clothes, their jewellery, and all that. But now I'm used to them.

Remember how you and Merri used to tease me because I had to go to deepest, darkest Africa? You said everyone there is poor, uneducated and helpless. Most of the things you said about it just aren't true. It's really kind of neat here.

I thought the land would be all flat, but it's not. Kachere is around 1000 metres above sea level. So even though it's warm in the daytime, it cools down at night—just like it does at home in the summer.

In Kachere people live in huts with walls of bricks made from dried mud. The roofs are made of straw. Each hut or group of huts has an outhouse close by—ours, too. (It's like camping all the time.) The huts are about four metres by seven metres, and are usually divided into two rooms.

There's a small plot of land near each hut, where the family can grow their own maize (sort of like corn), peas, beans and other vegetables. There's also a big plot of land at the edge of the village where everyone works together to grow stuff like tea, tobacco and sugar. They sell these crops to a guy from the government.

There's no electricity here—so I can't watch any of my favorite TV shows. (Guess they wouldn't have them here anyhow.) We get our water by pumping it up from a well in the middle of town. I know it sounds different. But now that I'm used to the place, it sort of feels like home.

In Malawi most people stay in the same village where they were born. Once the kids grow up they usually build their own hut right near their parents' place. This means you have kids, parents and grandparents living right next to each other. Just like at home, family members and family life are really important to people.

Almost every family has a mom, dad and about five kids. They have more kids than we do because the parents need them to help with the chores and when they get old. There aren't any nursing homes or stuff like that. So the kids look after their parents in their old age, and the old people look after the babies. I think that's sort of neat.

People usually get married when they are teenagers and start having kids right away. (Can you imagine being married when you're 16? Yuch!) Sometimes I look at these girls who are about my size (even though they're older) and wonder if they like being married and having babies so young. But then, it doesn't seem strange to them because everybody does it.

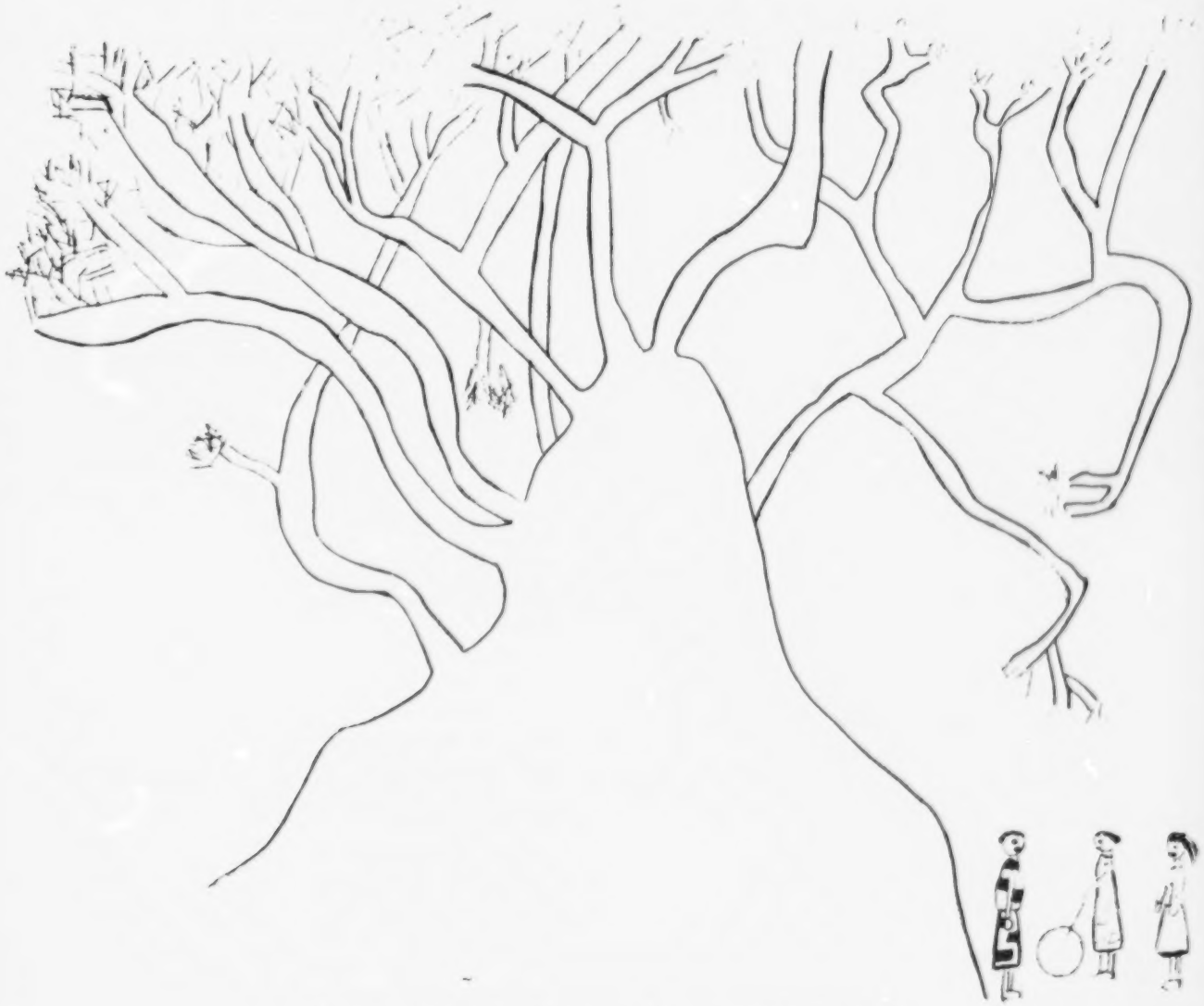
In Malawi, men and women do different kinds of work. The men's work changes with the seasons. They farm the land, build things, make bricks for the huts, fix things around the house and do all the heavy work. They still find time to get together and gossip and talk about the government. I guess people all over the world do that.

The women's life seems busier than the men's. (Just like at home, Mom says.) The women get up very early to go outside the hut to start the fire to cook breakfast. They use wood or charcoal to make the fire.

The people eat a lot of bread-like stuff made from maize flour. They also eat vegetables, groundnuts and a little meat. Some families keep these skinny chickens that run around in the village streets, so the family can eat eggs and chicken.

Besides cooking, the women take care of the children, keep the hut clean, make clothes for themselves or the young girls and work in the fields if they have the time. (If you thought all people who don't have a lot of stuff are lazy—forget it!)

The kids here are like kids anywhere. They play games, go to school and help their parents. The little kids hang around with their moms. When they're six, they go to the village school. The parents think education is important and try to keep the kids in school until they need them to help with family work.



A giant baobob tree where we hang out after school.

The Kachere school only goes to grade six. If the kids want to go to secondary school (that's what it's called from grade seven on), they have to go to Dedza. But almost nobody does. It's too far away and too expensive to live away from home.

All the boys and girls play a game with a hoop and a stick. They use the stick to keep the hoop rolling down the village streets. I was hopeless at the game at first. I'm much better with the hoop now, but not as good as my girlfriends. I've got two good friends, Amelie and Winnie.

The boys like to play soccer. They play pick-up games mostly, but last week they played against a team from another village. There's even a professional soccer league in Malawi!

There are no doctors in Kachere. Dad says there is only one doctor for every 50,000 people in Malawi. I asked if that was a lot and he said no. He said that in North America there are a lot of doctors compared to Malawi. Can you believe this - in Beverly Hills, where so many TV and movie stars live, there is a doctor for every 52 people! They must get sick a lot!

Even though there aren't many doctors here, health workers come into the village at least once a week. If people get really sick, they have to go to the district hospital in Dedza.

One of the neat things about living here is that I've learned a lot about people. Even though life is different here, people are pretty much the same as at home. They want a loving family, friends, a roof over their heads, enough food, good health and an education. And of course they like to have special things too—like bikes or radios (no, there are no FM rock and roll stations).

That's it for now. I expect a nice long letter from you telling me everything that's going on. You can ask me any questions you want about life here, and I'll try to answer them. Say hi to your mom and dad and give Joey a punch on the arm for me.

Your friend,

Mandy

17

Malawi

Name – Malawi means *land of flaming water*. This is a reference to the sunlight on 600-kilometre-long Lake Nyasa.

Location – Southeast Africa; bordered by Tanzania, Zambia and Mozambique.

Size – About 118,485 square kilometres.

Population – Seven million people. Most of the people live in villages and rural areas. Only 10% live in cities. Almost half the population is under 14. Average life expectancy is 46 years.

Climate – Cool in highlands, hot in southern lowlands.

Economy – Farming. Main crops are tea, tobacco and cotton.
Exports: tobacco, sugar, tea, peanuts, cotton.
Imports: fuel, vehicles, garments, food.

Jobs – Over 50% of population work in farming, forestry or fishing.

Education – Six out of every 100 boys and two out of every 100 girls go to secondary school.

TEACHERS' NOTES

REACHING FOR RESPECT

Student Reporters Set The Record Straight

Media news in developed countries like Canada often emphasizes the problems of developing countries. News about the world should show a balance between problems and progress.

Activity at a Glance

Students write, produce and tape a television or radio news show which reports on recent problems and progress in the developing world.

Learning Outcomes

Students will be able to:

- dramatize a number of important international events that occurred in the preceding year
- recognize excessive negative reporting about the developing world

Suggested Time: Three to four hours

Curriculum Tie-In

Social Studies
Language Arts
Map Work

Materials

The "Student Reporters Set the Record Straight" student activity sheets (one set per student)
Newspapers and news magazines
Videotape camera and recorder, or tape recorder
Stop watches

Suggested Directions

1. Divide the students into groups of five or more to form television news teams. Tell the class that their task is to create a news program that will recap some of the past year's important news stories on countries in the developing world.

2. Distribute the "Student Reporters Set the Record Straight" activity sheets. Have the students read these sheets.

3. Before students start developing the news stories in their groups, discuss news reporting in general. Ask: "Do you watch TV news? How do news reporters present their stories? (They present a lead to a story, interviews with involved people, pictures of the scene with voice-overs, and a concluding statement.) Do you think TV news always reports the news stories fairly, giving both sides of a problem or issue?"

4. Briefly discuss the five W's of journalism: who, what, when, where and why (and how).

5. Have the student groups gather ideas for news stories. They can read newspapers and magazines and watch television to identify relevant news stories. Tell them to plan their stories so that each is approximately five minutes in length. Each presentation should include two stories: one about a problem, the other about an area of progress.

6. Have the student groups write scripts, and edit and rehearse their stories according to the steps on the student activity sheets.

7. Have the student groups work together to present their stories in a news program. Videotape the show, if possible. (If videotaping is not possible, make an audio tape.)

8. Watch or listen to the tape of the news program with students. Have students describe what they learned from the exercise. Ask: "What kinds of problems might a news team face in researching the news? In writing it? In presenting it?"

Extension

Have the students break into three or more "news analysis teams." Each team should select a news program from a different TV channel. The team should record the topic and time each news story was presented. What was the lead story on each program? The second and third story on each program? How much time was devoted to local, national and international news? Were the stories positive or negative? Did the TV news coverage vary by network? If it did, what were some of the differences?

Student Reporters Set The Record Straight

Pretend you are part of a news team that works for a weekly news magazine show. This week's show will focus on the world's **developing countries**—countries where most people are poor.

Your team must produce two five-minute story segments. One story should be about a problem in a developing country. The other story should be about progress or good news in a developing country.

The members of your news team are:

- anchor person(s)—reads the news in the studio
- reporter(s)—reports on a news story from the scene of the event
- news editor—makes sure the stories are easy to understand and present the most important information
- researcher—researches background and information on a story for the reporter(s)
- camera operator (if a videotape camera and recorder are used)—person who operates this equipment
- tape recorder operator (if a tape recorder is used)
- director—helps everyone else work together

1. Decide who will do the various jobs on the team. Some people may play more than one role.

2. Now you can begin to gather and prepare news stories. Tasks to be carried out include:

   (a) find news stories on countries in the developing world

   (b) select the news stories to be presented

   (c) prepare a map which will show TV viewers the location of the country in the story

   (d) write the script, which will include:

   - a lead to the story (a few sentences stating the most important facts about the story)
   - background information on the people, country, regions, customs, and so on
   - "live action" and/or "interviews" with people in the news story
   - a concluding statement

   (e) record any "on-the-scene" reports, with members of your group acting as reporters and people in the developing country where the events occurred (if necessary)

   (f) prepare or gather any props for the story

   (g) rewrite, time and rehearse the presentation of the stories

   (h) record the news stories

When writing your news stories, keep the five W's of journalism in mind: who, what, when, where and why (and how). Try to present both sides of each news story. If you can, instead of just stating the facts of the situation, explain *why* the events have happened. Tell *how* they might affect the people in that country and other countries.

AFRICA
INDONESIA
MEXICO
INDIA
PAKISTAN
BRAZIL
BANGLADESH

REACHING FOR COOPERATION

The Hand-to-Hand Game

Working cooperatively can improve performance and increase the chance for success. Yet people often fail to recognize the potential for cooperation.

Activity at a Glance

Students attempt to win prizes in a game that appears to be a competitive test of strength. If they listen carefully, they will realize that it can be played cooperatively. Those who cooperate will score much higher than those who compete.

Learning Outcomes

Students will be able to:

- express the benefits of cooperating to accomplish various tasks
- list examples of competition and cooperation between countries

Suggested Time: Three-quarters of an hour

Curriculum Tie-in

Social Studies

Materials

Current short articles, brochures and other printed materials that present examples of international *competition* and international *cooperation*. (See suggested directions for possible topics.)
Six prizes
Three thick ropes (optional)

Suggested Directions

1. On a bulletin board or wall, post current articles and other printed materials giving examples of international *competition* and *cooperation*. If possible, do this several days before playing the game described below. Do not explain the underlying theme of the bulletin board or wall display to students before they play the game. However, do encourage them to browse through the display when they have time. This will give them a background of knowledge for the discussion following the game-playing.

2. Tell students: "Choose a partner whose strength is about equal to yours. Sit facing each other across a desk top. Place your right elbow on the desk. Grasp your partner's right hand.

   "Now listen carefully. To do well in this game, you must pay close attention to the rules. Even though the position is the same as the position for arm wrestling, the game is different.

   "You will score a point each time your partner's right hand touches the desk. There are six prizes. A prize will be given to the six students with the highest scores. Make sure you keep track of your score. Those are the rules of this game." (Pause to let the students talk briefly, but do not accept questions.)

   "We will play two 20-second rounds. Get ready to start the first round...GO."

3. After the first round, write the highest scores on the board. Again, allow students time to talk—they may be figuring out that they can cooperate.

4. Play the final round, using left hands this time. Write the final scores on the board, determine the winners and award the prizes.

5. Ask the class: "Who had the highest scores, those with overwhelming strength or those who chose to cooperate? Why do you think they had the highest scores? According to the rules, was it 'legal' to cooperate? Why didn't everyone cooperate?

6. Ask the class: "Do countries sometimes behave as if they *have to* compete? How do they compete? (If necessary, refer students to the bulletin board or wall display for examples.) How do countries behave when they act competitively about nuclear arms or fishing in the ocean? How could they solve such problems if they decided to cooperate? (Arms limitations; disarmament verification procedures; agreements not to deplete the fisheries)

7. Ask the students if they can think of any examples of countries cooperating to solve global or regional problems. (If necessary, refer students to the bulletin board or wall display for examples.) One striking example is famine relief in Africa. Many

international organizations provide aid in areas such as food distribution, health, development projects, education and human rights. These organizations include UNICEF, the Red Cross, Oxfam, and Save The Children. They are supported by people all over the world. Many governments—including Canada, the United States, the Soviet Union, Japan and India—have contributed to famine relief. Other examples of international cooperation are extradition of criminals, air hijacking treaties, the eradication of smallpox, and the 1962 ban of nuclear weapons tests in the atmosphere.

8. **OPTIONAL** - Play "The Rope Game." Divide the class into groups of ten or more people. For each group, tie the ends of a long piece of rope together to make a large loop. Have each group sit in a circle. Place the rope loop inside the circle in front of the group members' feet.

   Tell the students to hold the rope with both hands and stand up. If everyone pulls at the same time, the entire group should be able to come up to a standing position. If the group members don't cooperate, difficulties will arise.

TEACHERS' NOTES

REACHING FOR COOPERATION

No Kidding

Conditions for children in the developing world have generally improved over the last few decades through the cooperative efforts of many countries. There are two major ways for one country to help another: through direct aid, and by contributing to a development agency such as UNICEF.

Activity at a Glance

Students read, answer questions about and discuss two interesting stories about cooperation that saved children's lives. At the end of the chapter, the students play a cooperative game.

Learning Outcomes

Students will be able to:

- name two diseases prevented by vaccinations
- name three countries currently working to vaccinate all of their children
- explain how war threatens children's health
- explain how vaccinations prevent disease
- express the benefits of cooperating to accomplish various tasks

Suggested Time: One and a half to two hours

Curriculum Tie-in

Social Studies
Health
Language Arts

Materials

The "No Kidding" student activity sheets (one set per student)
Masking tape (optional)

Suggested Directions

1. Distribute the "No Kidding" student activity sheets. Have students read the article "Kids Stop A War." Have students answer questions 1 - 4.

2. Discuss with students the answers to the questions.

3. **OPTIONAL** - Ask students: "We know why we vaccinate children, but does anyone know how vaccination prevents the disease?" Read and discuss with students the background article "How Vaccination Shots Fight Disease."

4. Have students read the article "Sharks Save Kids' Lives." Have students answer the questions.

5. Discuss with students the answers to the questions.

6. **OPTIONAL** - Divide students into two groups.

   (a) Have one group develop and present a skit based on the article "Kids Stop a War." In their skit, students should incorporate the information about how a vaccine works. (Skit scenes may include: training health care workers to give vaccinations, convincing the soldiers to stop fighting so the children can get the vaccinations, health workers giving the vaccinations, people talking about the importance of peace to children's health.)

   (b) Have the remaining group develop and present a skit based on "Sharks Save Kids' Lives." (Skit scenes may include examination of sick children, ships bringing cod-liver oil to European ports, children taking cod-liver oil, people catching sharks and extracting shark oil, children swallowing shark-oil capsules, adults showing healthy bodies resulting from taking fish oils as children.)

7. Play "The Line Game." This is a game in which the players must cooperate in order to be successful. The game can be played inside using a straight line in a gymnasium or a straight line of masking tape placed on the classroom floor. The game can also be played outdoors, using a log or a line on the playground.

   (a) Divide the class into groups of eight to ten. Assign each person in a group a number from one to ten.

   (b) Have students stand on the line (or log) in the order of their numbers.

(c) Tell the students to change places with the person next to them (no.1 with no.2, no.3 with no.4, etc.). Each student must always keep at least one foot on the line at all times. The second foot may be off the line, but it may not touch the floor.

(d) Re-assign the numbers. The student now at the front of the line is no.1, etc.

(e) Now, have everyone change places with the person who is the same distance from the end of the line. For example, with ten people, no.1 and no.10 would exchange places, followed by no.2 and no.9, no.3 and no.8, no.4 and no.7 and finally no.5 and no.6. The same rules about feet remaining on the line apply.

(f) Have the students return to their seats. Discuss the activity. Ask: "What did the players do to help each other change places? Could they have managed to stay on the line if they hadn't helped each other? What does this tell us about the importance of cooperation?"

Extensions

- Many teachers and nurses have worked in the developing world. Invite to class someone who can give your students an eyewitness account of public health work in a developing country.

- Have students interview their grandparents to see if they took cod-liver oil when they were children. Students could also ask grandparents to talk about health care generally as they remember it from their youth. Invite someone who lived in Europe right after World War II to talk to students about living conditions there after the war.

No Kidding

Kids Stop A War

For eight years there had been war in El Salvador, a small country in Central America. Everyone was too busy fighting to think of children's health.

As a result, 20,000 kids died every year because they didn't get vaccination shots to protect them against diseases like measles and polio.

Then, on three days in 1988, the enemies in the El Salvador war agreed to stop fighting, so that thousands of children could be vaccinated. On those cease-fire days, 200,000 shots were given. These were shots that help keep people alive, instead of shots that kill.

All children need vaccinations against disease. Every year millions of children die because they haven't had shots.

In North America and Europe, most children are vaccinated. But even on these continents, parents sometimes forget that vaccinations are necessary. They forget that, though diseases like measles and polio have almost disappeared in North America and Europe, children can still get them.

Governments have to remind parents that shots are important. Many North American and European schools won't allow children to come to class until they have written proof of vaccination.

In the poorer countries of Asia, Africa and Latin America, most children have *not* been vaccinated. It's not that the vaccines are expensive. It costs only six dollars for all the vaccines needed to protect a child against measles, whooping cough, polio, tetanus and diphtheria.

The problem is that poor countries have few doctors. This is because it costs at least $50,000 to train one doctor. In some

places there is only one doctor for every 40,000 people. Many of these people are spread over hundreds of kilometres in villages and on farms. (Canada has one doctor for every 550 people. Many Canadians live in cities or towns, close to their doctors.)

There is a solution to the problem of vaccinations in poorer countries. It isn't necessary for a doctor to give the shots. A health care worker can do the job, if he or she is well-trained. And it costs only $500 to train a health care worker. The government of El Salvador trained health care workers to save thousands of children during the vaccination cease-fire.

Can kids stop a war? It happened in El Salvador, even if it was only for a few days. Perhaps those days gave the armies a chance to do some thinking—to remember the value of life. Perhaps the vaccination cease-fire helped people realize how important peace is. A country that is at peace can take better care of its children's health. In a country not torn by war, those children have a much better chance of growing up to be healthy, happy adults.

1. Why should children be vaccinated?

2. Do students in your community need written proof that they have received their vaccinations before they can attend school? Why or why not?

3. Why have many children in Asia, Africa and Latin America not received vaccinations against disease? How could this problem be solved?

4. Three South American countries that are working to vaccinate their children as quickly as possible are Colombia, Brazil and Bolivia. Find these countries on a world map. Use an encyclopedia or other reference to find out one interesting fact about each country. Write your facts below.

Colombia _____

_____

Brazil _____

_____

Bolivia _____

_____

Background Article

How Vaccination Shots Fight Disease

If you lived on the bank of a river, and you heard that a flood was coming, what would you do? Would you build a wall of sandbags to protect your house, *before* the flood came? Or would you wait until the flood waters rushed in before you started building the wall?

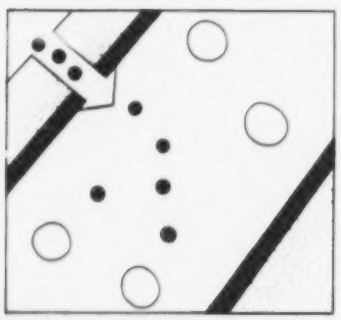
Vaccination shots work in much the same way as building a sandbag wall before a flood comes. A vaccine is made of dead germs or weak living germs. When you receive a vaccination, the germs go into your blood. As soon as the germs enter your blood, the blood makes **antibodies**, which attack the germs. The three diagrams at the bottom of the page show how antibodies destroy germs.

It's easy for the antibodies to destroy the germs, because the germs are either dead or very weak. Usually you don't feel sick after a vaccination. But sometimes you feel a little sick while your body is fighting the germs.

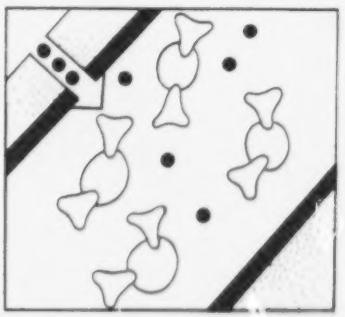
A vaccination protects you from a future "flood" of germs. The antibodies that are made as a result of the vaccination stay in your blood for a long time. Often they stay for the rest of your life. If strong germs from the air, water or a cut attack you, your antibodies are waiting, ready to fight the germs.

Often it's quite different when powerful germs attack a person who hasn't been vaccinated. The unvaccinated person will probably get sick, and many even die.

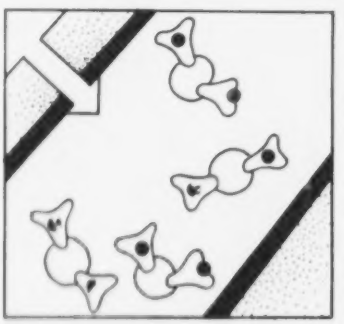
Vaccines protect you against diseases like measles, polio and tetanus. Tetanus antibodies, unlike the others, last for only five to ten years. During the first few years of your life, you should have received several tetanus shots. After about age six, you only need a shot every ten years. However, suppose you get cut by something especially dirty, like a rusty nail. If this happens five or more years after your last tetanus shot, you'll need another one right away—just to make sure you don't get tetanus.



A. Germs (the black dots) enter the bloodstream.



B. The blood makes antibodies, which are attached to white blood cells.



C. The antibodies surround and destroy the germs.

60

Sharks Save Kids' Lives

If you've ever seen sharks, you know they're dangerous-looking fish with big teeth. How could sharks save kids' lives? It all started back in 1947, after World War II. Because of lack of food during the war, the children of Europe were suffering from health problems.

Many children were thin, pale and stunted in growth. Six or seven-year-olds appeared to be only four or five years old. Some were so weak from lack of food that they didn't even move when health care workers examined them.

One out of every three European children had rickets. Rickets is a childhood disease resulting from lack of calcium and Vitamin D. Children usually get calcium from milk and Vitamin D from sunlight. But during wartime, farmers often can't produce food as usual. This makes milk scarce. During wartime, children often spend much of their time hiding from the fighting, instead of playing outside where they get Vitamin D from sunlight. Rickets can cause bones to soften and bend. Some of the European children's legs were bowed like C's—a telltale sign of the disease.

Doctors and health care workers knew that rickets could be cured by exposing children to sunlight every day and giving them daily doses of cod-liver oil. The doctors and health care workers told UNICEF that European children needed large amounts of cod-liver oil. But 1947 was a poor year for cod fishing, so there wasn't much fish oil in most of Europe.

Norway, Canada and New Zealand were the biggest producers of cod-liver oil at the time. They came to the rescue. These countries gave huge metal drums of the precious oil to UNICEF. Shipping companies from 11 nations carried the oil to

European ports. Because of this generous help, UNICEF was able to supply daily doses of cod-liver oil for European children. The cost was only 11 cents a month per child.

However, cod-liver oil has a very strong taste. Many children hated it. Sometimes adults had to swallow some of the oil themselves before the children would do it.

From 1948 to 1950, daily doses of cod-liver oil helped improve the health of millions of children. But there was still not enough oil for all the children who needed it.

In 1953, the New Zealand government took action to stop the "oil crisis." It contributed shark oil. Shark oil, a much richer source of Vitamins A and D, was extracted from sharks caught in the South Pacific. Companies in Canada and the United Kingdom put the shark oil extract into millions of small capsules. Children could swallow these without having to taste the strong-flavored oil. They liked the capsules better than the liquid fish oil.

Altogether, European children swallowed an astonishing 4,000,000 kilograms of cod-liver oil and 700,000,000 shark-liver capsules.

Today, most European adults in their forties and fifties have straight legs, straight backs, strong teeth and normal height. Many European adults wouldn't have such strong, healthy bodies if it hadn't been for the Vitamin D from the fish oils. They can be grateful for the partnership of people all over the world. They can also thank the sharks who helped save kids' lives.

1. How did World War II affect the children of Europe?

_____

_____

_____

_____

2. What disease was affecting European kids most after World War II? What was the cause of the disease? What was the treatment for the disease?

_____

_____

_____

_____

_____

_____

62

3. What actions did countries take cooperatively to help the children of Europe?

4. How did sharks save kids' lives?

Appendix A Curriculum Matrix

	Social Studies	Language Arts	Math	Health	Map Work
The Paper Bag Game	X			X	X
The Child Protectors	X	X	X	X	
Malnutrition – A Silent Disaster	X	X	X	X	X
What a Team – 100 Million Farmers and 10 Canadians	X	X			
Anx Vrnwu Iziaw	X	X			
Word Power	X	X			X
Letter From a Village	X	X			X
Student Reporters Set The Record Straight	X	X			X
Hand-to-Hand Game	X				
No Kidding	X	X		X	

Appendix B Gross National Products, 1984

	GNP per capita (US $), 1984
Bangladesh	130
Tanzania	210
Mozambique	230
Haiti	320
Papua New Guinea	710
United Kingdom	8570
Japan	10630
Germany, Fed. Rep.	11130
Australia	11740
Canada	13280
USA	15390

Appendix C Educating for Cooperation

The nations of the world are just beginning to explore the enormous potential benefits of cooperation. To reach their potential, students must develop cooperative skills. **Within Our Reach** includes:

- games that are best played cooperatively

  The Paper Bag Game
  The Hand-to-Hand Game
  The Line Game (in "No Kidding")
  The Rope Game (in "The Hand-to-Hand Game")

- activities in which students team up to solve problems and make presentations

  The Child Protectors
  What a Team
  Student Reporters Set the Record Straight
  No Kidding

- real-life examples of impressive accomplishments in national and international cooperation

  What a Team
  No Kidding
  The Child Protectors
  Word Power
  Student Reporters Set the Record Straight

GLOSSARY

Antibody - a substance in your blood that attacks germs when they enter the body.

Dehydrated - having lost too much water.

Developed Country - a modern, industrialized country.

Developing Country - a country with little industry and much poverty.

Development Agency - an international organization that provides aid in areas such as health, education and food distribution to help people help themselves.

Diarrhea - frequent and loose bowel movements.

Functionally illiterate- unable to read well enough to do everyday tasks.

GOBI - four simple, low-cost methods used to protect the health of children. GOBI stands for Growth checking, Oral rehydration, Breast-feeding and Immunization.

Growth Checking - weighing children every month to ensure they are growing normally.

Immunization - medicine, usually injected with a needle, that protects a person from a certain disease.

Infant Survival Rate - number of children in a country who live at least to the age of one. For example, 991 out of every 1000 children born in Canada survive to the age of one.

Illiterate - unable to read or write.

Literate - able to read and write.

Malnutrition - lack of food and/or lack of proper food required for good health.

Oral Rehydration - giving something by mouth to help the body take in fluids to replace those it has lost because of diarrhea.

Subsistence Farmer - a farmer who can only grow enough food to feed himself and his family. The farmer has no extra food to sell.

Under-five Survival Rate - number of children in a country who live at least to the age of five. For example, 99 out of every 100 children born in Canada survive to the age of five.

UNICEF Canada

UNICEF Canada,
443 Mount Pleasant Road
Toronto, Ont. M4S 2L8
Telephone: (416) 482-4444

UNICEF British Columbia,
P.O. Box 602, Station 'A'
Vancouver, B.C. V6C 2N5
Telephone: (604) 687-9096

UNICEF Victoria,
Room 411
835 Humboldt Street
Victoria, B.C. V8V 4W8
Telephone: (604) 381-4483

UNICEF Alberta
824 Imperial Way, S.W.
Calgary, Alta. T2S 1N7
Telephone: (403) 243-6398

UNICEF Edmonton,
5920-104th Street,
Edmonton, Alta. T6H 2K3
Telephone: (403) 434-6839

UNICEF Saskatchewan,
314-220-3rd Avenue South,
Saskatoon, Sask. S7K 1M1
Telephone: (306) 242-4922

UNICEF Regina,
2210 Albert Street, Suite 7,
Regina, Sask. S4P 2V2
Telephone: (306) 352-5449

UNICEF Manitoba,
745 Carter Avenue (at Lilac)
Winnipeg, Man. R3M 2C3
Telephone: (204) 453-5967

UNICEF Ontario,
333 Eglinton Avenue E.,
Toronto, Ont. M4P 1L7
Telephone: (416) 487-4153

UNICEF Ottawa-Carleton,
63 Sparks Street, 1st Floor,
Ottawa, Ont. K1P 5A6
Telephone: (613) 233-8842

UNICEF Québec,
209 ouest, rue St-Paul,
Vieux-Montréal, Qc H2Y 2A1
Telephone: (514) 288-1305

UNICEF Québec Métropolitain
1048, av. des Erables,
Québec, Qc G1R 2M9
Telephone: (418) 683-3017

UNICEF New Brunswick,
1 Market Square, Level 3,
Saint John, N.B. E2L 4Z6
Telephone: (506) 634-1911

UNICEF Nova Scotia,
1217 Barrington Street,
Halifax, N.S. B3J 1Y2
Telephone: (902) 422-6000

UNICEF Prince Edward Island,
P.O. Box 294,
Charlottetown, P.E.I. C1A 7K4
Telephone: (902) 892-3790

UNICEF Newfoundland,
P.O. Box 1984,
St. John's, Nfld. A1C 5R4
Telephone: (709) 726-2430

UNICEF

The United Nations Children's Fund is the main UN channel for the delivery of grassroots development programs to the most vulnerable group in developing countries—mothers and children. The program focuses on providing basic services in health, nutrition, water supply, education and other social services with emphasis on community involvement, development of local institutions and use of appropriate technology. UNICEF gives its full support to the World Health Organization's objective of universal immunization which, if achieved, would save as many as five million children a year from death caused by preventable diseases. UNICEF has also encouraged the application of the 'self-health' principle in many developing countries: a low-cost method involving oral rehydration therapy, immunization, breast-feeding and growth checking which has had a significant impact on the health of children and the reduction of mortality rates in the Third World.

Unicef Canada
in cooperation with the Canadian International Development Agency.